Special Issue

Advances in Light-Emitting Structures and Materials

Message from the Guest Editors

We invite you to contribute your original research to the Special Issue *"Advances in Light-Emitting Structures and Materials"* of the journal *Materials*. The issue summarizes recent progress in experimental and theoretical research on emission of light, including device design and fabrication, material processing, as well as the physics, modeling, characterization, tuning, and optimization of the emission properties of relevant materials and structures. Topics include but are not limited to:

- Emission of light from inorganic and organic semiconductors, (nano-)structures and 2D materials;
- Photoluminescence, electroluminescence, and optical cooling;
- Plasmonics, gratings, photonic crystals and nanophotonics;
- Light-emitting diodes (LEDs), lasers, novel emitter devices and on-chip optical communication;
- Optical modeling techniques based on classical Maxwell's equations or quantum optics;
- Study of emission enhancement and directionality;
- Electrical modeling, including drift–diffusion modeling, Monte Carlo simulations, and first-principle approaches;
- Emerging/novel simulation methods based, e.g., on machine learning.

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Deadline for manuscript submissions

closed (30 November 2021)

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About the Journal

Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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